

Appl. No. 10/670,980
Amdt. dated July 21, 2005
Reply to Office action of April 22, 2005

Amendments to the Specification:

Please amend paragraph [0024] on page 6 as shown below.

Referring to both Figs. 1 and 2, connected to imprint head 18 is a template 26 having a mold 28 thereon. Mold 28 and/or template 26, may be formed from various conventional materials, such as, but not limited to, fused-silica, quartz, silicon, organic polymers, siloxane polymers, borosilicate glass, fluorocarbon polymers, metal, hardened sapphire and the like. Mold 28 includes a plurality of features defined by a plurality of spaced-apart recessions 28a and protrusions 28b. The plurality of features defines an original pattern that is to be transferred into a substrate 30 positioned on motion stage 20. To that end, imprint head 18 and/or motion stage 20 may vary a distance "d" between mold 28 and substrate 30. In this manner, the features on mold 28 may be imprinted into a flowable region of substrate 30, discussed more fully below. Radiation source 22 is located so that mold 28 is positioned between radiation source 22 and substrate 30. As a result, mold 28 is fabricated from a material that allows it to be substantially transparent to the radiation produced by radiation source 22.

Please amend paragraph [0035] on page 11 as shown below.

Referring to Figs. 7 and 8 9, in a first method, under illumination with a first wavelength of light, two images may be received by an imaging device, such as sensor 46, sensing first and second polygonal marks 162 and 164. Assuming polygonal mark 162 is focused and polygonal mark

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164 is out-of-focus. An image processing technique may be used to remove geometric data corresponding to pixels associated with polygonal mark 164. Thus, the out-of-focus polygonal mark of the substrate mark may be eliminated, leaving only polygonal mark 162. Using the same procedure and a second wavelength of light, polygonal marks 262 and 264 may be sensed by sensor 46. One of the polygonal marks 262 and 264 is not focused by collection lens 52 on sensor 46, shown a polygonal mark 262, but polygonal mark 264 is focused onto sensor 46. As before, geometric data associated with polygonal mark 262 is removed, leaving only geometric data associated with polygonal mark 264. Thereafter, polygonal marks 162 and 264 are superimposed forming alignment marks 265 to ascertain alignment between template and substrate.

Please amend paragraph [0041] on page 14 as shown below:

Referring to Figs. 12 and 13, to prevent imprinting material (not shown) from entering a region of substrate 30 in superimposition with alignment marks 80, alignment marks 80 are surrounded by a moat system 336. This is important as the opaqueness of alignment marks ~~1302~~ 80 formed from metal would hinder, if not prevent, solidification of curable liquid. Segments 336a, 336b, 336c and 336d of moat system 336 separate molds 328, 330, 332 and 334. Specifically, segments 336a, 336b, 336c and 336d have a sufficient depth to curable liquid from substantially egressing therein from adjacent active molds 328, 330, 332 and 334 due to capillary forces. Additionally, moat system 336 may include a segment 336e that surrounds molds 328, 330, 332 and 334.

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